# C ancer hemotherapy and P harmacology

Volume 25 1989/90

# Edited by

A. H. CALVERT, S. K. CARTER, M. J. EGORIN, D. R. NEWELL

## **Editorial Board**

- P. Alberto Geneva
- R. H. Blum New York
- M. Boiron Paris
- R. L. Comis Philadelphia
- T. Connors Carshalton
- R. C. Coombes Sutton
- M. d'Incalci Milan
- C. Dittrich Vienna
- S. Eckhardt Budapest
- B. W. Fox Manchester
- R. M. Fox Victoria
- S. Garattini Milano

- A. Gouyette Villejuif
- H. H. Hansen Copenhagen
- A. Jeney Budapest
- R. B. Livingston Seattle
- J. S. Macdonald Lexington
- T. J. McElwain Sutton
- J. G. McVie London
- F. M. Muggia Los Angeles
- M. Ogawa Tokyo
- G. Powis Rochester
- M. Rozencweig Brussels
- C. G. Schmidt Essen

- H. J. Senn St. Gallen
- C. Sessa Bellinzona
- J. F. Smyth Edinburgh
- S. Tsukagoshi Tokyo
- T. Tsuruo Tokyo
- F. A. Valeriote Detroit
- L. M. van Putten Rijswijk
- P. M. Wilkinson Manchester
- P. Workman Cambridge
- G. Wu Huan-Hsin Beijing



Springer International

# **Cancer Chemotherapy and Pharmacology**

This journal was founded in 1978. Founding editor: G. Mathé.
Editors: S. K. Carter, T. J. McElwain. As of volume 23 (1989): S. K. Carter, A. H. Calvert. As of volume 24 (1989): A. H. Calvert, S. K. Carter, M. J. Egorin.
Published by Springer International

### Copyright

04

Submission of a manuscript implies: that the work described has not been published before (except in the form of an abstract or as part of a published lecture, review, or thesis); that it is not under consideration for publication elsewhere; that its publication has been approved by all coauthors, if any, as well as by the responsible authorities at the institute where the work has been carried out; that, if and when the manuscript is accepted for publication, the authors agree to automatic transfer of the copyright to the publisher; and that the manuscript will not be published elsewhere in any language without the consent of the copyright holders.

All articles published in this journal are protected by copyright, which covers the exclusive rights to reproduce and distribute the article (e.g., as offprints), as well as all translation rights. No material published in this journal may be reproduced photographically or stored on microfilm, in electronic data bases, video disks, etc., without first obtaining written permission from the publisher.

The use of general descriptive names, trade names, trademarks, etc., in this publication, even if not specifically identified, does not imply that these names are not protected by the relevant laws and regulations.

While the advice and information in this journal is believed to be true and accurate at the date of its going to press, neither the authors, the editors, nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Special regulations for photocopies in the USA: Photocopies may be made for personal or inhouse use beyond the limitations stipulated under Section 107 or 108 of U.S. Copyright Law, provided a fee is paid. This fee is US \$ 0.20 per page, or a minimum of US \$ 1.00 if an article contains fewer than five pages. All fees should be paid to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, USA, stating the ISSN 0340-7004, the volume, and the first and last page numbers of each article copied. The copyright owner's consent does not include copying for general distribution, promotion, new works, or resale. In these cases, specific written permission must first be obtained from the publisher.

Printed in Germany by E. Kieser GmbH Graphischer Betrieb, D-8902 Neusäss bei Augsburg

© Springer-Verlag Berlin Heidelberg 1990

# Contents of volume 25

No. 1 (pp 1- 76) published 13 October 1989 No. 2 (pp 77-148) published 24 October 1989 No. 3 (pp 149-226) published 13 November 1989 No. 4 (pp 227-310) published 27 December 1989 No. 5 (pp 311-388) published 9 February 1990 No. 6 (pp 389-464) published 26 February 1990

Abildgaard U → Daugaard G

Aghaï E, Tökés ZA: Phenotypic variations dictate the intracellular compartmentalization of doxorubicin in normal human bone marrow cells 295

Alaoui Jamali MA, Yin M-b, Mazzoni A, Bankusli I, Rustum YM: Relationship between cytotoxicity drug accumulation, DNA damage and repair of human ovarian cancer cells treated with doxorubicin: modulation by the tiapamil analog RO11-2933 77

Alberts DS → Xu M-J

Alberts DS → Buzaid AC

Andrews PA → Mann SC

Arakali AV → Pendyala L

Archimbaud E, Troncy J, Sebban C, Guyotat D, Devaux Y, French M, Moriceau M, Viala J-J, Fiere D: Phase II trial of plicamycin and hydroxyurea in acute myelogenous leukemia 223

Atassi G, Dumont P, Gosse C, Fournier JP, Gouyette A, Roger P: Characterization of the anti-tumor activity against solid tumours of a new nitrosoureido sugar: Cv 233 205

Audhuy B → Jacquillat C

Avramis VI, Powell WC, Mecum RA: Cellular metabolism of 1-β-D-arabinofuranosyl-5-azacytosine and incorporation into DNA and RNA of human lymphoid CEM/0 and CEM/dCk(-) cells 19 Avril M-F → Jacquillat C

Bagshawe KD → Smith DB Baker R → Radel S

Baldew GS → Los G Ball D → Bishop JF

Bankusli I → Alaoui Jamali MA

Banzet P → Jacquillat C

Beattie G, Whelan J, Cassidy J, Milne L, Burns S, Leonard R: Herpes simplex virus, Candida albicans and mouth ulcers in neutropenic patients with non-haematological malignancy 75

Begent RHJ → Smith DB Belvedere G → Capolongo L

Benjamin LA, McGarry RC, Hart DA: Effect of retinoic acid on human neuroblastoma. Correlation between morphological differentiation and changes in plasminogen activator and inhibitor activity 25

Benz CC → Wiebe VJ

Berendsen HH → Smit EF

Bernardini M → Danesi R Bernardini N → Danesi R Beynen JH → Vlasveld LT Bibby MC → Masters JRW Bishop JF → Reece PA

Bishop JF, Kefford R, Raghavan D, Zalcberg J, Stuart-Harris R, Ball D, Olver IN, Friedlander M, Bull C, Yuen K, Matthews JP, Zimet A: Etoposide, carboplatin, cyclophosphamide and vincristine in previously untreated patients with small-cell lung cancer 367

Bizzari J-P → Jacquillat C

Bizzari JP - Fischel JL

Blackledge GRP → Kerr DJ

Boas J, Rasmussen D, Hansen OP, Engelholm SA, Dombernowsky P: Phase II study of teniposide in advanced breast cancer 463

Bohm S → Di Re F

Bonerandi J-J → Jacquillat C Bonneterre J → Jacquillat C

Boogerd W → Vlasveld LT

Boschelli D → Ferguson K

Bradley C → Kerr DJ

Braine HG → Grochow LB Brann TW → Rosbe KW

Breau A → Chapman DE

Bronchud MH, Margison JM, Howell A, Lind M, Lucas SB, Wilkinson PM: Comparative pharmacokinetics of escalating doses of doxorubicin in patients with metastatic breast cancer 435

Brundrett RB → Grochow LB

Bugat R → Jacquillat C

Bull C → Bishop JF

Burns S → Beattie G

Burton EC → Maybaum J Butcher ME → Viner CV

Buzaid AC, Alberts DS, Einspahr J, Mosley K, Peng Y-M, Tutsch K, Spears CP. Garewal HS: Effect of dipyridamole on fluorodeoxyuridine cytotoxicity in vitro and in cancer patients 124

Cadman TB → Wiebe VJ

Calvo F → Extra JM

Capizzi RL → Wang LM

Capolongo L, Belvedere G, D'Incalci M: DNA damage and cytotoxicity of mitoxantrone and doxorubicin in doxorubicinsensitive and -resistant human colon carcinoma cells 430

Carruthers L → Smith DB

Cassidy J → Beattie G

Cerny T → Lind MJ

Chaney S → Rosenblum MG

Chapman DE, Moore DJ, Melder DC, Breau A, Powis G: Isolation, identification and biological activity of a phyllanthoside metabolite produced in vitro by

mouse plasma 184 Chaudary MA → Twelves CJ Chen T-L → Grochow LB

Cheshire P → Houghton PJ

Christensen B → Ueland PM

Clagett-Carr K → Foster BJ

Cleary SM → Kirmani S

Clemens MR → Ladner C Coleman RE → O'Reilly SM

Colvin OM → Grochow LB

Cowens JW → Pendyala L

Crawford SM → Smith DB

Creaven PJ → Pendyala L

Crespeigne N → Schwartsmann G

Cupissol D → Jacquillat C

Currie DC, Miles DW, Drake JS, Rudd R, Spiro SG, Earl HM, Harper PG, Tobias JS, Souhami RL: Mitomycin, ifosfamide and cisplatin in non-small-cell lung

cancer 380

Daly EM → Greig NH

Danesi R, Bernardini N, Marchetti A, Bernardini M, Del Tacca M: Protective effects of fructose-1,6-diphosphate on acute and chronic doxorubicin cardiotoxicity in rats 326

Daugaard G, Abildgaard U: Cisplatin

nephrotoxicity. A review 1

Deeb G → Gaver RC

DeGregorio MW → Wiebe VJ

Deloffre P → Fischel JL

Del Tacca M → Danesi R

Devaux Y → Archimbaud E

Dijk A v → Zonnenberg BA

D'Incalci M → Capolongo L

D'Incalci M → Zanette L Di Re F, Bohm S, Oriana S, Spatti GB,

Zunino F: Efficacy and safety of highdose cisplatin and cyclophosphamide with glutathione protection in the treatment of bulky advanced epithelial

ovarian cancer 355

Di Salle E → Zaccheo T Dive C, Workman P, Watson JV: Inhibition of cellular esterases by the antitumour imidazotetrazines mitozolomide and temozolomide: demonstration by flow cytometry and conventional spec-

trofluorimetry 149 Dodion P → Schwartsmann G

Dolan ME, Larkin GI, English HF, Pegg AE: Depletion of O6-alkylguanine-DNA alkyltransferase activity in mammalian tissues and human tumor xenografts in nude mice by treatment with O6-methylguanine 103

Dombernowsky P → Boas J

Dopfer R → Klingebiel T

Drake JS → Currie DC

Dumont P → Atassi G Durr FE → Wallace RE

Dykes DJ → Harrison SD Jr

Earl HM → Currie DC

Eder JP → Teicher BA Egami K → Yoshida T

Ehninger G → Klingebiel T

Ehninger G → Ladner C

Einspahr J → Buzaid AC

Engelholm SA → Boas J

English HF → Dolan ME

Ensminger WD → Maybaum J

Erranti D → Zanette L

Espie M → Extra JM

Etienne MC → Fischel JL

Extra JM, Espie M, Calvo F, Ferme C, Mignot L, Marty M: Phase I study of oxaliplatin in patients with advanced cancer 299

Farnworth P, Hillcoat B, Roos I: Metallothionein-like proteins and cell resistance to *cis*-dichloro-diammineplatinum(II) in L1210 cells 411

Feine U → Klingebiel T Fenwick E → Masters JRW

Ferguson K, Boschelli D, Hoffman P, Oronsky A, Whiteley J, Webber S, Galivan J, Freishiem J, Hynes J, Kerwar SS: Synergy between 5,10-dideaza-5,6,7,8-tetrahydrofolic acid and methotrexate in mice bearing L1210 tumors 173

Ferme C → Extra JM Fiere D → Archimbaud E

Fischel JL, Formento P, Etienne MC, Gioanni J, Frenay M, Deloffre P, Bizzari JP, Milano G: In vitro chemosensitivity testing of Fotemustine (S 10036), a new antitumor nitrosourea 337

Formento P → Fischel JL

Foster BJ, Harding BJ, Wolpert-DeFilippes MK, Rubinstein LY, Clagett-Carr K, Leyland-Jones B: A strategy for the development of two clinically active cisplatin analogs: CBDCA and CHIP 395 Fournier JP → Atassi G Fredericks W → Radel S

Frei E III → Rosbe KW
Freishiem J → Ferguson K
Frenay M → Fischel JL
French BT → Gibboney DS
French M → Archimbaud E
Freshi A → Zanette L
Friedlander M → Bishop JF
Fuchs D → Reibnegger G

Galivan J → Ferguson K Gall H → Schwartsmann G Garewal HS → Buzaid AC

Fumoleau P → Jacquillat C

Gaver RC, Deeb G, George AM: Validated HPLC procedures for the analysis of BMY-28090 in human plasma and urine 195

Genka S → Greig NH George AM → Gaver RC George WD → Stallard S Gey KF → Ladner C

Gibboney DS, French BT, Patrick DE, Trewyn RW: 6-Ethylmercaptopurinemediated growth inhibition of HL-60 cells in vitro irrespective of purine salvage 189

Gioanni J → Fischel JL

Goddard PM, Jones M, Pollard LA, Valenti MR, Harrap KR: The 5-HT<sub>3</sub> antagonist, BRL 43694, does not compromise the efficacy of cisplatin in tumour-bearing mice 377

Goel R, Sanga R, Howell SB: Pharmacologic basis for the use of dipyridamole to increase the selectivity of intraperitoneally delivered methotrexate 167

Goldstone A  $\rightarrow$  Twelves C Goodman G  $\rightarrow$  Mortimer JE Gore ME  $\rightarrow$  Viner CV Goren MP, Pratt CB, Viar MJ: Tubular nephrotoxicity during long-term ifosfamide and mesna therapy 70

Goren MP, Pratt CB: False-positive ketone tests: a bedside measure of urinary mesna 371

Gosse C → Atassi G

Greenhaldh DA Parish IH: I

Greenhalgh DA, Parish JH: Effects of 5-fluorouracil on cytotoxicity and RNA metabolism in human colonic carcinoma cells 37

Greig NH, Daly EM, Genka S, Sweeney DJ, Rapoport SI: Physicochemical and pharmacokinetic parameters of seven lipophilic chlorambucil esters designed for brain penetration 311

Greig NH, Daly EM, Sweeney DJ, Rapoport SI: Pharmacokinetics of chlorambucil-tertiary butyl ester, a lipophilic chlorambucil derivative that achieves and maintains high concentrations in brain 320

Grindey GB → Houghton PJ Griswold DP Jr → Harrison SD Jr

Grochow LB, Jones RJ, Brundrett RB, Braine HG, Chen T-L, Saral R, Santos GW, Colvin OM: Pharmacokinetics of busulfan: correlation with veno-occlusive disease in patients undergoing bone marrow transplantation 55

Grosshans E → Jacquillat C

Grunberg SM, Sonka S, Stevenson LL, Muggia FM: Progressive paresthesias after cessation of therapy with very highdose cisplatin 62

Guentert TW → Reece PA Guyotat D → Archimbaud E

Hafner MS → Maybaum J
Hagen B, Neverdal G, Walstad RA, Nilsen
OG: Long-term pharmacokinetics of
thio-TEPA, TEPA and total alkylating
activity following i. v. bolus administration of thio-TEPA in ovarian cancer

activity following i. v. bolus administr tion of thio-TEPA in ovarian cancer patients 257 Hansen OP → Boas J Harding BJ → Foster BJ

Harper P → Twelves C Harper PG → Currie DC

Harrap KR → Goddard PM
Harrison SD Jr, Plowman J, Dykes DJ,
Waud WR, Criswold DP Jr: Schedule
dependence, activity against natural
metastases, and cross-resistance of
pyrazine diazohydroxide (sodium salt,

NSC 361456) in preclinical models in vivo 425

Hart DA → Benjamin LA Hausen A → Reibnegger G Hejl M → Schmiegelow K

Hennik MB van → Schwartsmann G

 $\begin{array}{l} \text{Herman TS} \, \rightarrow \, \text{Teicher BA} \\ \text{Hilgard P} \, \rightarrow \, \text{Stekar J} \end{array}$ 

Hillcoat B → Farnworth P Hillcoat BL → Reece PA

Hill HS → Reece PA Hoesel QGCM van → Wagener DJT

Hoffman P → Ferguson K Holden SA → Rosbe KW

Holden SA → Teicher BA Holtei W → Stekar J Hoogenraad WJ → Wagener DJT Houghton JA → Houghton PJ Houghton PJ, Houghton JA, Myers L,

Houghton PJ, Houghton JA, Myers L, Cheshire P, Howbert JJ, Grindey GB: Evaluation of N-(5-indanylsulfonyl)-N'-(4-chlorophenyl)-urea against xenografts of pediatric rhabdomyosarcoma 84

Howbert JJ → Houghton PJ Howell A → Bronchud MH

Howell SB → Goel R Howell SB → Mann SC

Howell SB → Kirmani S

Hynes J → Ferguson K

Israel M, Sweatman TW, Seshadri R, Koseki Y: Comparative uptake and retention of adriamycin and *N*-benzyladriamycin-14-valerate in human CEM leukemic lymphocyte cell cultures 177

Jacquillat C, Khayat D, Banzet P, Weil M, Avril M-F, Fumoleau P, Namer M, Bonneterre J, Kerbrat P, Bonerandi J-J, Bugat R, Montcuquet P, Audhuy B, Cupissol D, Lauvin R, Grosshans E, Vilmer C, Prache C, Bizzari J-P: Chemotherapy by fotemustine in cerebral metastases of disseminated malignant melanoma 263

James N → Waxman J
Jenkins WEA → Masters JRW
Joggi J → Schwartsmann G
Jones M → Goddard PM
Jones RJ → Grochow LB
Jones SM → Teicher BA

Kanai M → Yoshida T Kanno M → Yoshida T Kaye SB → Stallard S

Kaye SB → Stallard S Kaye SB → Kerr DJ

Kefford R → Bishop JF Keller KD → Klingebiel T Kerbrat P → Jacquillat C

Kerr DJ, Slack JÅ, Secrett P, Stevens MFG, Blackledge GRP, Bradley C, Kaye SB: Relationship between the pharmacokinetics and toxicity of mitozolomide 352

Kerwar SS → Ferguson K Khayat D → Jacquillat C

Khokhar AR → Rosenblum MG Kim GE, Song CW: The influence of Fluosol-DA and carbogen breathing on the antitumor effects of cyclophosphamide

Kirmani S, Zimm S, Cleary SM, Mowry J, Howell SB: Extremely prolonged continuous intraperitoneal infusion of cytosine arabinoside 454

Klingebiel T, Treuner J, Ehninger G, Keller KD, Dopfer R, Feine U, Niethammer D: [133 I]-Metaiodobenzylguanidine in the treatment of metastatic neuroblastoma. Clinical, pharmacological and dosimetric aspects 143

Kobayashi K → Yoshida T Kondo K → Yoshida T Kopecky K → Mortimer JE Koseki Y → Israel M

Koseki Y → Israel M Kramer RA → Nakagawa Y Kramer RA: Protection against cisplatin nephrotoxicity by prochlorperazine 156

Krishnan BS → Pendyala L Kühl M → Schalhorn A

Ladner C, Ehninger G, Gey KF, Clemens MR: Effect of etoposide (VP16-213) on lipid peroxidation and antioxidant status in a high-dose radiochemotherapy regimen 210

Larkin GI → Dolan ME Larson RE → Stolzenbach JC

Lauvin R → Jacquillat C Leibovitz A → Xu M-J

Lenglet WJM → Los G Leonard R → Beattie G

Leyland-Jones B → Foster BJ

Liliemark J → Sundman-Engberg B Lindh D → Wallace RE

Lind M → Bronchud MH

Lind MJ, Margison JM, Cerny T, Thatcher N, Wilkinson PM: Prolongation of ifosfamide elimination half-life in obese patients due to altered drug distribution 139

Liu R → Xu M-J Liu Y → Xu M-J

Loadman PM → Masters JRW

Los G, Mutsaers PHA, Lenglet WJM, Baldew GS, McVie JG: Platinum distribution in *intra*peritoneal tumors after *intra*peritoneal cisplatin treatment 389

Lucas SB → Bronchud MH

MacDonald JS → Mortimer JE Malatesta V → Monti E

Mann SC, Andrews PA, Howell SB: Shortterm cis-diamminedichloroplatinum(II) accumulation in sensitive and resistant human ovarian carcinoma cells 236

Marchetti A → Danesi R Margison JM → Lind MJ

Margison JM → Bronchud MH

Marty M → Extra JM

Masters JRW, McDermott BJ, Jenkins WEA, Fenwick E, Shah PJR, Mundy AR, Loadman PM, Bibby MC: Thio-TEPA pharmacokinetics during intravesical chemotherapy and the influence of Tween 80 267

Matano S → Yoshida T Matsuda T → Yoshida T

Matthews JP → Bishop JF Maybaum J, Hafner MS, Burton EC, Stetson PL, Ensminger WD, Rogers CE: Response of human HT-29 colorectal tumor cells to extended exposure to

bromodeoxyuridine 45 Mayhew E → Radel S

Mazzoni A → Alaoui Jamali MA McDermott BJ → Masters JRW

McElwain TJ → Viner CV

McGarry RC → Benjamin LA McVie JG → Los G

Mecum RA → Avramis VI Melder DC → Chapman DE

Mignot L → Extra JM

Milano G → Fischel JL Miles DW → Currie DC

Miller AA, Stewart CF, Tolley EA: Clinical pharmacodynamics of continuousinfusion etoposide 361 Milne L → Beattie G

Momparler LF → Momparler RL

Momparler RL, Momparler LF: Chemotherapy of L1210 und L1210/ARA-C leukemia with 5-aza-2'-deoxycytidine and 3-deazauridine 51

Montcuquet R → Jacquillat C Monti E, Paracchini L, Piccinini F,

Malatesta V, Morazzoni F, Supino R: Cardiotoxicity and antitumor activity of a copper(II)-doxorubicin chelate 333

Moore DJ → Chapman DE Morazzoni F → Monti E

Moriceau M → Archimbaud E

Morrison JG → Stallard S Morris RG → Reece PA

Mortimer JE, Schulman S, MacDonald JS, Kopecky K, Goodman G: High-dose cisplatin in disseminated melanoma: a comparison of two schedules 373

Mosley K → Buzaid AC Mowry J → Kirmani S

Muggia FM → Grunberg SM

Mulder NH → Smit EF Mundy AR → Masters JRW

Murray JL → Rosenblum MG

Mutsaers PHA → Los G Myers L → Houghton PJ

Nakagawa Y, Kramer RA: Nephrotoxicity of 5-(N-phenylcarboxamido)-2-thiobarbituric acid in the Fischer 344 rat 109

Nakamura S → Yoshida T Namer M → Jacquillat C Natori H → Yoshida T

Neverdal G → Hagen B

Neville AJ, Singh G: Effect of whole-body
hyperthermia on hepatic cytochrome
P450 342

Newlands ES → Smith DB Newman RA → Rosenblum MG Niethammer D → Klingebiel T Nilsen OG → Hagen B

Nüssler V → Schalhorn A

Ohtake S → Yoshida T

Okafuji K → Yoshida T Oliver IN → Reece PA Olver IN → Bishop JF

O'Reilly SM, Coleman RE, Rubens RD: Phase II study of mitoxantrone for liver metastases from breast cancer 73

Oriana S → Di Re F Oronsky A → Ferguson K

Paracchini L → Monti E

Parish JH → Greenhalgh DA
Parodi MT, Varesio L, Tonini GP: Morphological change and cellular differentiation induced by cisplatin in human

neuroblastoma cell lines 114 Patrick DE → Gibboney DS Paul C → Sundman-Engberg B

Pawlicki M, Zuchowska-Vogelsang B, Sliz E: The case of Vepesid overdosage in a patient with Hodgkin's disease 387

Pegg AE → Dolan ME

Pendyala L, Krishnan BS, Walsh JR, Arakali AV, Cowens JW, Creaven PJ: Studies on the human metabolism of iproplatin 10

Pendyala L, Walsh JR, Huq MM, Arakali AV, Cowens JW, Creaven PJ: Uptake and metabolism of iproplatin in murine L1210 cells 15

Peng Y-M → Buzaid AC

Piccinini F → Monti E

Pinedo HM → Schwartsmann G Plowman J → Harrison SD Jr

Pollard LA → Goddard PM Postmus PE → Smit EF

Powell WC → Avramis VI Powis G → Chapman DE

Prache C → Jacquillat C

Pratt CB → Goren MP Pratt CB → Goren MP

Pulczynska MK → Schmiegelow K

Radel S, Fredericks W, Mayhew E, Baker R: P-Glycoprotein expression and modulation of cell-membrane morphology in adriamycin-resistant P388 leukemia cells 241

Raghavan D → Bishop JF Rapoport SI → Greig NH

Rasmussen D → Boas J

Reece PA, Oliver IN, Morris RG, Bishop JF, Guentert TW, Hill HS, Hillcoat BL: Pharmacokinetic study of doxifluridine given by 5-day stepped-dose infusion 274

Refsum H → Ueland PM

Reibnegger G, Fuchs D, Hausen A, Werner ER, Werner-Felmayer G, Wachter H: Unconjugated pteridines and the activation of macrophages by interferon gamma 308

gamma 308 Reidy J → Twelves CJ Richards MA → Twelves CJ Riemer U → Stekar J Rodenhuis S → Vlasveld LT

Roger P → Atassi G Rogers CE → Maybaum J

Roos I → Farnworth P
Rosbe KW, Brann TW, Holden SA,
Teicher BA, Frei E III: Effect of Ionidamine on the cyotoxicity of four alkylating agents in vitro 32

Rosenblum MG, Murray JL, Stuckey S, Newman RA, Chaney S, Khokhar AR: Modification of methyliminodiacetatotrans-R,R-1,2-diamminocyclohexane platinum (II) pharmacology using a platinum-specific monoclonal anti-

body 405 Rubens RD → O'Reilly SM Rubens RD → Twelves CJ Rubinstein LY → Foster BJ Rudd R → Currie DC Rustin GJS → Smith DB

Rustum YM → Alaoui Jamali MA

Sandow J → Waxman J

Sanga R → Goel R Santos GW → Grochow LB

Santos GW → Grochow L Saral R → Grochow LB

Sava G: Reduction of B16 melanoma metastases by oral administration of eggwhite lysozyme 221

Schalhorn A, Kühl M, Stupp-Poutot G, Nüssler V: Pharmacokinetics of reduced folates after short-term infusion of d,1-folinic acid 440

Schmiegelow K, Schrøder H, Pulczynska MK, Hejl M: Maintenance chemother-

apy for childhood acute lymphoblastic leukemia: relation of bone-marrow and hepatotoxicity to the concentration of methotrexate in erythrocytes 65

Schornagel JH → Zonnenberg BA Schrøder H → Schmiegelow K Schulman S → Mortimer JE

Schwartsmann G, Dodion P, Vermorken JB, Ten Bokkel Huinink WW, Joggi J, Winograd B, Gall H, Simonetti G, Vijgh WJF van der, Hennik MB van, Crespeigne N, Pinedo HM: Phase I study of Brequinar sodium (NSC 368390) in patients with solid malignancies 345

Sebban C → Archimbaud E Secrett P → Kerr DJ Selby PJ → Viner CV Seshadri R → Israel M Shah PJR → Masters JRW Shemano I → Wiebe VJ Simonetti G → Schwartsmann G Singh G → Neville AJ Slack JA → Kerr DJ

Sliz E → Pawlicki M Smit EF, Berendsen HH, Vries EGE de, Mulder NH, Postmus PE: A phase II study of carboplatin and vincristine in previously treated patients with smallcell lung cancer 202

Smith DB, Newlands ES, Rustin GJS, Begent RHJ, Crawford SM, Bagshawe KD, Carruthers L: A phase I/II study of the 5-HT3 antagonist GR38032F in the

anti-emetic prophylaxis of patients receiving high-dose cisplatin chemother-

apy 291 Song CW → Kim GE Sonka S → Grunberg SM Souhami R → Twelves C Souhami RL -> Currie DC Spatti GB → Di Re F Spears CP → Buzaid AC Spiro SG → Currie DC

Stallard S, Morrison JG, George WD, Kaye SB: Distribution of doxorubicin to normal breast and tumor tissue in patients undergoing mastectomy 286

Stekar J, Hilgard P, Holtei W, Riemer U: Protection from ifosfamide-induced alopecia by topical thiols in young rats 306

Stetson PL -> Maybaum J Stevens MFG - Kerr DJ Stevenson LL → Grunberg SM Stewart CF → Miller AA

Stolzenbach JC, Larson RE: BCNUinduced quantitative and qualitative changes in hepatic cytochrome P-450 can be correlated with cholestasis 227

Strijk SP -> Wagener DJT Struyvenberg A → Zonnenberg BA Stuart-Harris R → Bishop JF Stuckey S → Rosenblum MG Stupp-Poutot G → Schalhorn A Sugimoto R → Yoshida T

Sundman-Engberg B, Tidefelt U, Liliemark J, Paul C: Intracellular concentrations of anticancer drugs in leukemic cells in vitro vs in vivo 252

Supino R → Monti E Sweatman TW → Israel M Teicher BA → Rosbe KW Teicher BA, Holden SA, Jones SM, Eder JP, Herman TS: Influence of scheduling on two-drug combinations of alkylating

agents in vivo 161 Ten Bokkel Huinink WW → Schwarts-

mann G Ten Bokkel Huinink WW → Vlasveld LT

Thatcher N → Lind MJ Thomas H → Waxman J

Tidefelt U → Sundman-Engberg B

Tirelli U → Zanette L Tobias JS → Currie DC

Tökés ZA → Aghaï E Tolley EA → Miller AA

Tonini GP → Parodi MT Treuner J → Klingebiel T

Trewyn RW -> Gibboney DS Troncy J → Archimbaud E Tutsch K → Buzaid AC

Twelves C, Souhami R, Harper P, Goldstone A: Haematological recovery following high-dose cyclophosphamide with autologous bone marrow transplantation 213

Twelves CJ, Chaudary MA, Reidy J, Richards MA, Rubens RD: Toxicity of intra-arterial doxorubicin in locally advanced breast cancer 459

Ueland PM, Refsum H, Christensen B: Methotrexate sensitivity in Down's syndrome: a hypothesis 384

Valenti MR → Goddard PM

Varesio L → Parodi MT Vendrik CPJ → Zonnenberg BA Vermorken JB → Schwartsmann G Viala J-J → Archimbaud E Viar MJ → Goren MP Vijgh WJF van der → Schwartsmann G Vilmer C → Jacquillat C Viner CV, Selby PJ, Zulian GB, Gore ME, Butcher ME, Wootton CM, McElwain TJ: Ondansetron - a new safe and effective antiemetic in patients receiving highdose melphalan 449

Vlasveld LT, Beynen JH, Boogerd W, Ten Bokkel Huinink WW, Rodenhuis S: Complete remission of brain metastases of ovarian cancer following high-dose carboplatin: a case report and pharmacokinetic study 382

Vries EGE de → Smit EF

Wachter H → Reibnegger G Wagener DJT, Hoesel QGCM van, Yap SH, Hoogenraad WJ, Wobbes T, Strijk SP: Phase II trial of 5-fluorouracil, Adriamycin and cisplatin (FAP) followed by radiation and 5-fluorouracil in locally advanced pancreatic cancer 131

Wallace RE, Lindh D, Durr FE: Arabinofuranosyl-5-azacytosine: activity against human tumors in athymic mice 117

Walsh JR → Pendyala L Walstad RA → Hagen B

Wang LM, Courtland White J, Capizzi RL: The effect of ara-C-induced inhibition of DNA synthesis on its cellular pharmacology 418

Watson JV → Dive C Waud WR → Harrison SD Jr Waxman J, Sandow J, Thomas H, James N, Williams G: A pharmacological evaluation of a new 3-month depot preparation of buserelin for prostatic cancer 219 Webber S → Ferguson K

Weil M → Jacquillat C Werner ER → Reibnegger G

Werner-Felmayer G → Reibnegger G

Whelan J → Beattie G White JC → Wang L-M Whiteley J → Ferguson K

Wiebe VJ, Benz CC, Shemano I, Cadman TB, DeGregorio MW: Pharmacokinetics of toremifene and its metabolites in patients with advanced breast

cancer 247 Wilkinson PM → Lind MJ Wilkinson PM → Bronchud MH Williams CJ: A phase II study of oral idarubicin in advanced recurrent or refractory ovarian carcinoma 304

Williams G → Waxman J Winograd B → Schwartsmann G Wobbes T → Wagener DJT Wolpert-DeFilippes MK → Foster BJ Wootton CM → Viner CV Workman P → Dive C

Xu M-J, Alberts DS, Liu R, Leibovitz A, Liu Y: In vitro evaluation of cisplatin interaction with doxorubicin or 4-hydroperoxycyclophosphamide against human gynecologic cancer cell lines 89

Yap SH → Wagener DJT Yin M-b → Alaoui Jamali MA Yoshida T, Nakamura S, Ohtake S, Kobayashi K, Kanno M, Matsuda T, Matano S, Kondo K, Okafuji K, Kanai M, Sugimoto R, Egami N, Natori H: Salvage chemotherapy of refractory non-Hodgkin's lymphoma with aclacinomycin, behenoyl ara-C, etoposide, and prednisolone 135

Zaccheo T, Di Salle E: Effect of the irreversible aromatase inhibitor FCE 24304 on DMBA-induced mammary tumors in ovariectomized rats treated with testosterone 95

Zalcberg J → Bishop JF Zanette L, Zucchetti M, Freshi A, Erranti D, Tirelli U, D'Incalci M: Pharmacokinetics of 4-demethoxydaunorubicin in cancer patients 445

Zimet A → Bishop JF Zimm S → Kirmani S

Yuen K → Bishop JF

Zonnenberg BA, Dijk Av, Vendrik CPJ, Schornagel JH, Struyvenberg A: A phase 1 and pharmacokinetic study using the aromatic retinoic acid analogue dichloroetretinate (Ro 12-7554) 279

Zucchetti M → Zanette L Zuchowska-Vogelsang B → Pawlicki M Zulian GB → Viner CV Zunino F → Di Re F

